

To: Director and Laboratory Staff
From: Survey and Appraisal
Subject: SURVEY NOTES

FARM SITUATION AND GENERAL BUSINESS
ACTIVITY

STRONG DEMAND AND PRICE SUPPORTS CUSHION AGRICULTURAL PRICES AS LARGER CROP AND
LIVESTOCK PRODUCTION GOES TO MARKET

A strong demand and the Government price support programs have cushioned the impact on agricultural prices of this year's near-record crop output and seasonally larger marketings of livestock. Average prices received by farmers have declined relatively little in recent months. With the passing of the seasonal peak in marketings of most products, prices are likely to remain fairly stable in the next month or two.

Total industrial production recovered to the level of late summer after coal and steel operations were resumed in mid-November. In view of sharply depleted stocks of coal and steel, fairly high rates of activity in these industrial sectors are likely for at least the next few months. Other indications of a fairly high level of domestic activity and demand for farm products in the short-run are the near record level of construction activity and the end of the eight months decline in total business inventories.

The Demand and Price Situation, BAE, U.S.D.A., Nov. 1949, p. 1.

AVERAGE WHOLESALE PRICE INDEX DECLINES DURING OCTOBER

The average wholesale price index for all commodities declined to 202.9 during October, as compared to 204.9 during September of this year and 220.0 during November 1948.

Table 1.- Average wholesale prices given as index numbers, United States,
for specified months, August 1939 = 100

	: Oct. 1949	: Sept. 1949	: Aug. 1949	: Oct. 1948
	: Index	: Index	: Index	: Index
ALL COMMODITIES.....	202.9	204.9	203.9	220.0
Textile products.....	203.7	205.0	203.7	216.5
Clothing.....	177.4	177.7	177.7	182.0
Cotton goods.....	269.5	266.9	259.8	297.7
Hosiery and underwear.....	160.0	160.0	160.2	170.1
Rayon and nylon.....	138.9	138.9	138.9	146.7
Silk.....	111.1	111.1	111.1	104.7
Woolen and worsted goods.....	192.1	199.3	202.0	199.5
Other textile products.....	282.8	284.9	284.0	299.1
Farm products.....	261.6	267.3	266.0	298.6
Foods.....	237.5	241.1	239.0	263.8
Hides and leather products.....	195.6	195.4	193.0	200.1
Fuel and lighting materials.....	179.8	179.0	178.6	188.9
Metals and metal products.....	179.5	180.6	180.5	185.0
Building materials.....	211.1	211.4	210.0	226.9
Chemicals and allied products...	156.4	158.6	161.3	181.2
Housefurnishings.....	167.0	166.9	166.9	172.2
Miscellaneous.....	148.7	149.5	149.8	162.3

Computed from Average Wholesale Prices and Index Numbers of Individual Commodities,
Bureau of Labor Statistics, U. S. Department of Labor.

COTTON LINT

CROP OF 16 MILLION BALES INDICATED; GINNINGS ABOVE LAST YEAR

A cotton crop of 16,034,000 bales is estimated by the Crop Reporting Board of the Bureau of Agricultural Economics. The indicated 1949 crop for the United States, based on information as of December 1, is up 510,000 bales, or 3 percent, from the November 1 forecast and compares with 1948 ginnings of 14,877,000 bales and the 10-year average of 11,306,000 bales.

Cotton Production, BAE, Dec. 8, 1949, p. 1.

The Bureau of the Census reports 14,715,660 bales ginned from the crop of 1949 prior to December 13, compared with 13,430,401 bales for 1948 and 10,633,611 bales for 1947.

Report on Cotton Ginning, Bureau of the Census, Dec. 20, 1949

NEW COTTON PICKER DEVELOPED

A new tractor-drawn cotton picker, Empco Model 1, said to be twice as fast and only one-fourth the size of models now in use, has been developed by Empire Implement Company, Atlanta, Ga. It is 22 inches wide, 5-1/2 feet long and weighs 650 pounds. This model will pick from 1 to 1-1/2 bales of cotton an hour at a maximum cost of \$3 per bale, as compared to \$30 to \$45 per bale by hand. Because of its small size, it is reported to be especially effective on hilly and uneven ground. The Empire Implement Company has already made arrangements for obtaining parts necessary for large scale production.

Southern Textile News, Dec. 3, 1949, p. 12.

CONSUMPTION, STOCKS, AND SPINDLE ACTIVITY UP IN NOVEMBER

Cotton consumption was 772 thousand bales in November of this year, as compared with 726 thousand bales in October and 686 thousand bales in November 1948. Stocks rose from 9.5 million bales in October to 12.0 million bales in November, and was nearly 2 million bales larger than the November stocks of 1948. Active spindle hours and spindle activity were at high levels during November of this year.

Table 2.- Cotton consumption and stocks, and spindle hours in cotton mills

	November 1949	October 1949	September 1949	November 1948
Consumption, bales.....	771,833	725,602	709,958	685,881
On hand, 1000 bales.....	11,972	9,496	6,882	10,089
Active spindle hours, billions..	9.4	9.0	8.7	8.7
Spindle activity, percent of				
80-hour capacity 1/.....	124.8	123.3	115.2	111.9

1/ Includes activity on fibers other than cotton, totaling 0.3 to 0.6 billion spindle hours for each month shown.

From Census reports.

MILL MARGINS AND FABRIC PRICES INCREASE

Mill margins and the average price for 17 constructions of fabric increased from 36.88 and 66.32 cents in October to 38.17 and 67.91 cents in November. The price of 36" 2.35 yard osnaburg fabric has been rising steadily for each month since September because of a drastic shortage of burlap for use in bags. Middling

15/16 inch cotton and rayon staple prices were about the same as last month, with the equivalent viscose staple price being slightly cheaper than cotton.

Table 3.- Prices of raw cotton, rayon staple and cotton fabrics, and cotton mill margins in cents

	Dec. 15: : 1949 :	Nov. : : 1949 :	Oct. : : 1949 :	Sept. : : 1949 :	Nov. : 1948
Cotton, Middling 15/16"	:	:	:	:	:
delivered at mills, lb.....	31.83	31.37	31.15	31.74	32.95
Rayon, viscose staple	:	:	:	:	:
equivalent price 1/, lb.....	31.15	31.15	31.15	31.15	32.93
Rayon, acetate staple	:	:	:	:	:
equivalent price 1/, lb.....	37.38	37.38	37.38	37.38	42.72
Cotton fabrics, average 17 constructions.	:	:	:	:	:
Price for cloth from 1 lb. of cotton 2/:	-	67.91	66.32	64.48	66.44
Mill margins 3/.....	-	38.17	36.88	34.70	35.35
Sheeting, 37" 4.00, yd. 4/.....	16.25	16.25	16.25	16.00	16.50
Osnaburg, 36" 2.35, yd. 5/.....	21.50	21.00	20.63	20.00	21.25
Printcloth, 38-1/2" 5.35, yd. 4/.....	15.00	15.00	15.00	15.00	15.00

1/ Cost to mill of same amount of usable fiber as supplied by one pound of cotton (rayon price x.89).

2/ Price of approximate quantity of cloth obtainable from a pound of cotton with adjustments for saleable waste (Cotton Branch, P. M. A.).

3/ Difference between cloth prices and price (10-market average) of cotton assumed to be used in each kind of cloth (Cotton Branch, P. M. A.).

4/ From Daily Mill Stock Reporter.

5/ From Daily News Record.

UNITED STATES PER CAPITA CONSUMPTION OF COTTON AND RAYON HIGHEST IN THE WORLD

The United States per capita consumption of cotton and rayon was 29.3 and 7.5 pounds, respectively, during 1948, the highest in the world; while its wool per capita consumption for the same year was 4.9 pounds, ranking fourth among the nations of the world.

Per capita consumption of cotton during 1948 was higher than in 1938 in the United States, Australia, France, Argentina, Italy, and Brazil; it was lower in the United Kingdom, Germany, Egypt, Russia, India-Pakistan, Japan, and China. Use per person for rayon during 1948 was higher than 1938 in most of the nations, except for Germany, Italy, and Japan. Increases in per capita consumption of wool took place in the United States, Australia, France, Argentina, Italy, and Brazil, while decreases occurred in the United Kingdom, Germany, Egypt, and Japan.

Table 4.- Cotton, Wool, and rayon per capita, by leading countries of the world, 1938 and 1948

	1948				1938			
	Cotton:	Wool :	Rayon :	Total :	Cotton:	Wool :	Rayon :	Total
	Pounds:	Pounds:	Pounds:	Pounds:	Pounds:	Pounds:	Pounds:	Pounds
United States....	29.3 :	4.9 :	7.5 :	41.7 :	22.0 :	2.2 :	2.4 :	26.6
United Kingdom...	14.8 :	5.9 :	3.4 :	24.1 :	18.1 :	6.8 :	2.1 :	27.0
Australia.....	11.2 :	6.4 :	3.8 :	21.4 :	9.9 :	6.0 :	2.8 :	18.7
France.....	11.5 :	5.1 :	3.3 :	19.9 :	10.1 :	4.0 :	1.3 :	15.4
Argentina.....	12.8 :	4.0 :	1.0 :	17.8 :	11.0 :	3.1 :	0.6 :	14.7
Italy.....	6.6 :	2.0 :	1.2 :	9.8 :	4.4 :	1.3 :	3.4 :	9.1
Brazil.....	7.9 :	0.4 :	0.6 :	8.9 :	7.7 :	0.4 :	0.3 :	8.4
Germany.....	3.1 :	1.5 :	3.5 :	8.1 :	7.5 :	3.3 :	7.3 :	18.1
Egypt.....	5.7 :	0.2 :	0.4 :	6.3 :	6.0 :	0.4 :	0.4 :	6.8
Russia.....	4.8 :	0.7 :	1/ :	5.5 :	7.3 :	0.9 :	1/ :	8.2
India-Pakistan...	4.4 :	0.1 :	0.1 :	4.6 :	4.6 :	0.1 :	0.2 :	4.9
Japan.....	2.4 :	0.2 :	0.7 :	3.3 :	12.8 :	1.5 :	5.7 :	20.0
China.....	2.9 :	0.1 :	1/ :	3.0 :	3.5 :	0.1 :	1/ :	3.6
Total World.....	6.0 :	1.1 :	1.1 :	8.2 :	6.6 :	1.1 :	0.9 :	8.6

1/ No data available.

From Rayon Organon, November 1949, p. 172.

COTTON TEXTILE INDUSTRY AND EQUIPMENT

TEXTRON TO ERECT RAYON PLANT IN SOUTH CAROLINA

Textron, Inc. will construct a new filament rayon weaving plant near Williamston, South Carolina, at a cost of between \$3.5 and \$4.0 million. The new plant will have about 300 employees and an annual payroll of between \$800 thousand and \$900 thousand. The mill will have 960 looms and will be a complete operation, with warping, winding, slashing, and weaving. The plant will have 160,000 square feet of floor-space, and refrigerated air conditioning.

Southern Textile News, December 3, 1949, p. 1.

ENGLISH RESEARCH FOUNDATION DEVELOPS AUTOMATIC DOFFER FOR RING-SPINNING FRAMES

According to Edwin Fowle of the Textile World Magazine, who visited the International Exhibition of Textile Machinery in Manchester, England, The British Cotton Industry Research Association has developed an automatic doffer for cotton ring-spinning frames. He further states, "It is estimated that one pair of automatic doffers is sufficient for some 20 normal-sized frames spinning medium counts. The machine is not expected to reach the market for some two years, and no estimate as to its manufacturing costs and probable price has been released."

Daily News Record, December 8, 1949, p. 3.

COTTON PRODUCTS

BAGS: BEMIS FINDS NEW ADHESIVE FOR BAGS

According to an announcement by the Bemis Bro. Bag Co., they have developed a polyethylene-lined laminated textile bag which combines the numerous advantages of the new plastic film with the strength and handling advantages of cotton or

burlap laminated textile bags. The company has found an asphalt laminating compound that is actually a waterproofing agent in itself and will also stick polyethylene to fabric. The laminated material thus produced is even more moisture resistant than polyethylene itself. They further stated that the company had been successful in finding a colorless adhesive which can be used for laminating polyethylene either direct to a fabric or to a paper sheet between the fabric and the polyethylene. Bags of this type are particularly suited for chemicals and other products which tend to deteriorate ordinary bags in a relatively short time, and for products which are susceptible to contamination and moisture damage.

Journal of Commerce, November 30, 1949, p.16.

BAGS: COTTON AND BURLAP BAG PRICES RISE; PAPER DECLINES

On December 15, cotton and burlap bag prices were \$1.25 and \$20.80 per thousand higher than on the same date last month, while paper bags were \$4.55 per thousand less. All second-hand bag prices were up from last month. The net cost (based on difference between prices for new and once-used bags) to use new cotton flour bags was \$89.00 per thousand; burlap \$123.85 per thousand; and paper, \$89.15 per thousand.

Table 5.- Mid-month prices of 100 pound flour bags

	(Dollars per thousand)			
	December	November	October	December
	1949	1949	1949	1948
<u>Prices, new, St. Louis 1/</u>				
Cotton.....	239.00	237.75	234.75	237.00
Burlap.....	243.85	223.05	216.95	246.70
Paper.....	94.15	98.70	98.70	114.05
<u>Prices, second-hand, New York</u>				
Cotton, once-used 2/.....	150.00	140.00	135.00	140.00
Cotton, bakery run 3/.....	100.00	95.00	75.00	115.00
Burlap, once-used 2/.....	120.00	110.00	100.00	4/
Burlap, bakery run 3/.....	100.00	95.00	95.00	115.00
Paper, bakery run 3/.....	5.00	2.50	3.33	10.00
<u>Difference</u>				
Cotton, new minus once-used..	89.00	97.75	99.75	97.00
Cotton, new minus bakery run..	139.00	142.75	159.75	122.00
Burlap, new minus once used..	123.85	113.05	116.95	4/
Burlap, new minus bakery run..	143.85	128.05	121.95	131.70
Paper, new minus bakery run..	89.15	96.20	95.37	104.05

- 1/ Cotton, 37" 4.00 yd. sheeting cut 43" unprinted; burlap, 36" 10 oz. cut 43" unprinted; paper, 18 x 4-1/2 x 36-3/4" unprinted; all l. c. l. shipments. No allowance made for quantity or cash discounts. From a large bag manufacturer.
- 2/ From a large second-hand bag dealer.
- 3/ From Daily Mill Stock Reporter.
- 4/ No data available.

FABRIC: THIRD QUARTER COTTON BROAD WOVEN GOODS PRODUCTION 3 PERCENT BELOW SECOND QUARTER

Production of cotton broad woven goods (exclusive of tire cord and fabric) was 1,942 million linear yards during the third quarter of 1949, or 3 percent below the second quarter and 14 percent below the same quarter of 1948.

Journal of Commerce, Nov. 30, 1949, p. 16.

MERCERIZED YARNS: COSTLY PROCESSING, SYNTHETIC YARN INROADS SEEN DAMAGING MARKET

According to a prominent New York textile authority, even under the most favorable conditions, the best the cotton trade can hope for is to hold the business it has had in recent years. It is believed that all of the expansion in demand will occur in the production of synthetics. His opinion is that mercerization, as handled and under present requirements, is not likely to increase in demand, but rather to decline.

Luster cannot be secured in a cotton yarn except by the mercerizing process which also gives the yarn high abrasion characteristics. Future developments may make possible a mercerized effect at a decidedly lower cost than at present, or it may be possible to obtain higher luster on finer yarns without using too expensive cotton. At a lower cost and with the present high abrasion characteristics, it could be that some particular use would develop where rubbing was an important item and where the mercerized yarn would be much more suitable at the price than some other material.

The American Wool and Cotton Reporter, Nov. 17, 1949, p. 12.

NON-WOVEN FABRIC: NEW MATTED FILLER INCREASES STRENGTH OF PHENOLIC LAMINATES

The Synthane Corp. of Oaks, Pa., claims to be producing a new plastic material (Grade LRF) with high impact fatigue values and superior machinability, in which the electrical and chemical values are not sacrificed. These properties stem from the use of a non-woven cotton fabric filler, one having an even distribution of fibers and uniform strength in all directions. As a result, plastic parts made from this material wear much more evenly than those fabricated from the conventional woven-fabric-filler plastic laminates.

Tests conducted by the Synthane Corp., consisting of dropping one-pound weight from a height of one foot at a rate of 40 blows per minute on a notched impact specimen, showed that Grade LRF resisted 5,000 blows as against 50 blows for Grade L and 100 blows for Grade C. Another outstanding characteristic of Grade LRF is its ability to be machined to finish to a very smooth surface. Because of its combination of properties, Grade LRF suggests itself for use in gears, cams, bearings, spools, bobbin heads, and punched parts where Grades C and L are now used. The new material is also expected to replace many combination materials which use fabric laminations for mechanical strength and paper for smooth surfaces. Grade LRF is currently being produced in sheets, rods, and molded tubing.

Rayon and Synthetic Textiles, Dec. 1949, p. 37.

NON-WOVEN FABRIC: ORTHOPEDIC BANDAGE OF COTTON FELT MADE

According to an announcement by the Kendall Mills, Bauer & Black of Chicago is producing an orthopedic bandage made of Kendall Mills' recently developed Webril R, a non-woven cotton felt.

Daily News Record, Dec. 13, 1949, p. 25.

TIRE FABRIC: RAYON ACCOUNTED FOR 71 PERCENT OF THE TIRE FABRIC PRODUCTION DURING THE THIRD QUARTER.

Rayon accounted for 71 percent of the tire cord and fabric production in the third quarter of 1949, as compared to 59 percent in the second quarter and 54 percent in the first quarter. The total production of tire cord and fabric was down to 101 million pounds during the July-September period, due primarily to the drop off in the production of cotton tire cord and fabric. Cotton tire cord and fabric production was 59 million pounds in the first quarter of 1949, and has declined every quarter since then, to fall to a low point of 29 million pounds during the July-September period.

Table 6.- Production of cotton and rayon tire cord and fabric in the United States, for specified years and quarters

Year	Quantity			Percentage		
	Cotton 1/	Rayon 2/	Total	Cotton	Rayon	Total
	Million pounds	Million pounds	Million pounds	Percent	Percent	Percent
	:	:	:	:	:	:
1946.....	311	213	524	59	41	100
1947.....	346	230	576	60	40	100
1948.....	293	250	543	54	46	100
1st. qtr....	88	61	149	59	41	100
2nd. qtr....	72	60	132	55	45	100
3rd. qtr....	69	64	133	52	48	100
4th. qtr....	64	65	129	50	50	100
1949	:	:	:	:	:	:
1st. qtr....	59	69	128	46	54	100
2nd. qtr....	48	68	116	41	59	100
3rd. qtr....	29	72	101	29	71	100

1/ Includes square-woven fabrics used for chafers, etc.

2/ Includes small quantity of nylon.

Compiled from Facts for Industry, "Cotton Broad Woven Goods," Bureau of the Census.

TIRE FABRIC: PRICES UNCHANGED FROM LAST MONTH

Prices of tire fabrics were the same as last month. On a square yard basis, 12/4/2 cotton fabric for passenger car tires ranged from 57.8 to 58.7 cents as compared to 48.6 cents for 1650/2 rayon fabric. In table 7, the fabric weights per square yard for each type of fabric have been revised in line with recent information obtained from the tire manufacturers.

Table 7.- Prices of cotton and rayon tire fabric, December 1 and November 1, 1949

Fabric	Cord	Fabric weight		Price per pound		Price per sq. yd.	
		per sq. yd. 1/		Dec. 1	Nov. 1	Dec. 1	Nov. 1
		Pound		Cents	Cents	Cents	Cents
		:	:	:	:	:	:
Passenger car tires:	:	:	:	:	:	:	:
Cotton fabric.....	12/4/2:	.91	:	63.5-64.5	63.5-64.5	57.8-58.7	57.8-58.7
Cotton fabric.....	12/3/3:	.94	:	64.5	64.5	60.6	60.6
Rayon fabric.....	1650/2:	.79	:	61.5	61.5	48.6	48.6
Truck tires	:	:	:	:	:	:	:
Rayon fabric.....	1100/2:	.62	:	64.0	64.0	39.7	39.7
Rayon fabric.....	1650/2:	.78	:	61.5	61.5	48.0	48.0
Rayon fabric.....	2200/2:	.82	:	60.5	60.5	49.6	49.6

1/ These are typical fabric weights and vary somewhat for different tire manufacturers.

Based on reports from independent rubber companies.

COMPETITIVE PRODUCTS

NYLON, ORLON, AND ACETATE: DECETEX 104 WATERPROOFS FABRICS MADE FROM THESE FIBERS

According to F.L. Dennett, Dow Corning Corp., nylon, orlon, and acetate rayon fabrics may now be waterproofed with a new silicone known as DeCetex 104. Originally designed as a durable water-repellent treatment for nylon and mixtures containing a large percent of that fiber, it has also been found that fabrics containing acetate rayon and mixtures of acetate and viscose can be treated with DeCetex 104. Mill trials and laboratory tests have also proven that it may be used successfully on Orlon.

This new silicone is said to be a non-toxic, non-inflammable solvent. It is colorless, odorless, and contains no corrosive chemicals, according to Mr. Dennett. Experiments are now being carried on with a modification of DeCetex 104 as a water-repellent treatment for cotton or mixtures of cotton and other fibers, but these are not yet ready for production runs.

American Wool and Cotton Reporter, Nov. 10, 1949, p. 42.

ORLON: NO PILOT PLANT FOR THIS FIBER

According to E. I. du Pont de Nemours & Co., there is no pilot plant for the production of Orlon, although the plant for commercial production of this fiber is under construction at Camden, S. C. It is not expected to be in operation until late in 1950. Production of the Orlon staple is being made at the acetate plant at Waynesboro, West Virginia, where the filament Orlon is made, but this production is limited to experimental quantities.

In this connection, du Pont states that although there is interest in the possibility of the use of Orlon staple in men's suitings, the prospects for any such development are far in the future.

American Wool and Cotton Reporter, Nov. 10, 1949, p. 42.

RAYON AND NYLON: PRODUCTION OF BROAD WOVEN GOODS UP IN THIRD QUARTER

Third quarter production of rayon broad woven goods amounted to 452 million linear yards, a 4 percent increase over the second quarter of 1949 and 14 percent below the same three month period of 1948. Production of nylon broad woven goods for the July-September period of 1949 was 25 million linear yards, as compared to 21 million yards for the second quarter of this year and 9 million yards for the same quarter of 1948.

Journal of Commerce, Nov. 30, 1949, p. 16.

RAYON: NOVEMBER RAYON CONSUMPTION HIGHER THAN LAST YEAR'S CONSUMPTION

Total rayon consumption was 99.7 million pounds during November of this year, or 6.8 million pounds higher than November of last year. The consumption of filament yarn and staple fiber increased 4.1 and 2.7 million pounds, respectively, over November of 1948.

Table 8. Rayon consumption by types, United States, for specified months
(Million pounds)

	: Nov. 1949	: Oct. 1949	: Sept. 1949	: Nov. 1948
CONSUMPTION, TOTAL.....	99.7	99.9	97.5	92.9
Filament yarn.....	75.5	74.9	74.8	71.4
Viscose.....	49.3	49.0	48.5	45.8
Acetate.....	26.2	25.9	26.3	25.6
Staple.....	24.2	25.0	22.7	21.5
Viscose.....	15.5	16.5	14.8	15.3
Acetate.....	8.7	8.5	7.9	6.2

From Rayon Organon.

RAYON: SYNTHETIC FIBER EXCEEDS WOOL IN WORLD PRODUCTION OF WEARING APPAREL FABRICS

Synthetic fibers have climbed above wool in the total world production of wearing apparel fabrics, according to the Food and Agriculture Organization, Washington, D. C. Rayon in the past year provided 13.4 percent of fiber used for clothing, compared with 11.3 percent provided by wool, 75.1 percent for cotton, and .2 percent for silk.

Southern Textile News, Nov. 26, 1949, p. 2.

RAYON: DUPONT RAISES PRICES ON CERTAIN TYPES OF YARNS

Du Pont increased its prices on certain sizes of viscose yarns by an average of 4 percent, effective on orders beginning December 1. The increases ranged from 5 cents per pound on the 50 denier yarn to 2 cents per pound on the deniers of 300 to 900 inclusive. The important 150 denier yarn was raised 3 cents per pound to 74 cents. The above prices are for the cone package. No change was made in the prices of staple, acetate filament yarn, or viscose tire yarn.

Rayon Organon, December 1949, p. 178

RAYON: SWISS COMPANY DEVELOPS A FLOCK SPRAYING PROCESS

According to the Societe de la Viscose of Emmenbruecke, Switzerland, they have developed a process for flocking viscose rayon staple on cloth, leather, cardboard and similar articles by spraying to produce suede, velvet and plush affects. It is known as the Flisca Fiber Technique. The short staple fiber may be applied to an adhesive backing by either a spray or an electrostatic method. In spraying it is applied by use of compressed air in a manner said to be similar to that of spraying of paint. By the other method, the fibers are said to be drawn by an electromagnetic system onto a resin-treated surface. Fibers of specific lengths are used for particular effects, a length of 0.5 millimeters giving a suede appearance, 1 millimeter a similarity to velvet, and 1.5 millimeters the appearance of plush.

American Wool and Cotton Reporter, Nov. 24, 1949, p. 16.

NEW FIBER DEVELOPED BY AMERICAN VISCOSE AND MONSANTO COMPANIES

According to William H. Brown of the Viscose Corp., The Chemstrand Corp., jointly owned by the American Viscose Corp. and the Monsanto Chemical Co., has developed a new fiber that has many of the same qualities as Orlon. It will first be blended with rayon and later attempts will be made to blend it with wool. The new fiber will be made available by pilot operations at Avisco's plant in Marcus Hook, Pa., within the next few months. As yet, no definite plans have been made for the construction of a new plant for producing the fiber.

Journal of Commerce, Nov. 21, 1949, p. 14.

SYNTHETIC FIBERS: CHARACTERISTICS GIVEN

Mr. Rene Bouvet, head of the Textile Development Section, American Viscose Corporation gives data on the characteristics of various synthetic and natural fibers (table 9), and on Fiber V (table 10).

Table 9.- Specific gravity and dry strength of various fibers

Fiber	Specific gravity	Dry strength, grams per denier
Polyethylene.....	.92	1.5 - 3.0
Nylon.....	1.14	4.5 - 8.0
Orlon.....	1.17	4.0 - 5.0
Silk.....	1.25	3.5 - 4.0
Vicara.....	1.25	0.8 - 1.0
Ardil.....	1.30	0.6 - 0.7
Acetate.....	1.32	1.3 - 1.8
Wool.....	1.32	1.6
Vinyon.....	1.35	1.0 - 4.0
Fiber V.....	1.38	4.8 - 7.0
Viscose.....	1.52	2.2 - 3.75
Ramie.....	1.52	4.0 - 6.0
Cotton.....	1.54	3.0 - 6.0
Vinylidene Chloride.....	1.72	1.8 - 2.5
Glass.....	2.52	6.0 - 6.5
Steel.....	7.80	4.0

Table 10.- Characteristics on Fiber V

Characteristics	Types of Fiber V		
	V-100	V-111	V-130
Dry strength, grams/denier.....	4.8	5.3	6.5
Dry, extensibility.....	16%	17.5%	8.6%
Boil off, shrinkage.....	11-13%	2-3%	6%

Daily News Record, November 21, 1949, p. 1, 26.

PLASTICS: SHEETING PRODUCED FOR USE OVER FOAM RUBBER

Production of a new all-plastic sheeting for upholstery use over foam rubber is now under way, according to the United States Rubber Company. It is intended to avoid the staining, stiffening and discolorations which have occurred in plastic coverings caused by some of the chemicals in foam rubber. The new fabric is sold under the Naugahyde name with a smooth, high-luster finish. It is being produced at the Mishawaka, Indiana plant in 12 and 20 gauge, 54 inches wide.

Daily News Record, Nov. 30, 1949, p. 27.

PAPER: PRODUCTION OF SHIPPING SACK PAPER FOR JANUARY-OCTOBER 1949 THIRTY-THREE PERCENT BELOW SAME PERIOD OF 1948.

Production of shipping sack paper for the January-October period of 1949 amounted to 385,653 tons, or 33 percent below the production for the same 10-month period.

of 1948. This downward trend in the production of shipping sack paper indicates that there were less paper bags in 1949 to compete with cotton and burlap bags.

Table 11.- Production of shipping sack paper, United States, for specified periods and months of 1948 and 1949

	1949	1948
	Tons	Tons
January-October.....	385,653	572,892
July.....	35,490	54,072
August.....	37,552	58,228
September.....	42,921	56,280
October.....	46,333	53,426

Facts for Industry, "Pulp and Paper Manufactures," Bureau of Census.

WOOL: CONSUMPTION DECLINED DURING OCTOBER

Total raw wool consumption, on a scoured basis, was 46.4 million pounds in October of this year, or 6 percent under the quantity used during September. Consumption for the first ten months of 1949 was well below that for the same period last year. Apparel wool consumption on the woolen and the worsted system for the ten-month period of 1949 was 18 percent and 42 percent, respectively, below the consumption for the same period last year. Carpet wool consumption dropped from 172.3 million pounds during the first ten months of 1948 to 131.2 million pounds during the January-October period of 1949, the largest drop, quantitatively being on the woolen system.

Table 12.- Consumption of wool of the sheep, scoured basis, United States, for the specified periods and months.

(Million pounds)

	Apparel class			Carpet class, foreign			Grand
	Woolen:	Worsted:	Total	Woolen:	Worsted:	Total	
	system:	system:		system:	system:		total
Jan.-Oct. 1948 1/.....	141.8	278.6	420.4	166.5	5.8	172.3	592.7
Jan.-Oct. 1949 1/.....	116.1	162.3	278.4	128.8	2.4	131.2	409.6
July 1949 2/.....	10.8	11.9	22.7	4.7	.1	4.8	27.5
Aug., 1949 2/.....	12.8	16.4	29.2	10.4	.4	10.8	40.0
Sept. 1949 3/.....	15.0	21.0	36.0	13.0	.5	13.5	49.5
Oct. 1949 2/.....	13.6	20.0	33.6	12.8	-	12.8	46.4

1/ Total for 43 weeks.

2/ Total for 4 weeks.

3/ Total for 5 weeks.

Facts for Industry "Wool Manufactures," Bureau of the Census.

WOOL: PRODUCTION DOWN IN 1949

According to the Bureau of Agricultural Economics, total wool production for 1949 is estimated at 259 million pounds, or 115 million pounds on a scoured basis, which is 43 percent under the record of 1942 when 455 million pounds were produced, and 8 percent under the 1948 production of 281 million pounds. Of this

1949 total, shorn wool production is estimated at 216 million pounds, grease basis. This would be the smallest clip since 1879 and is 8 percent, or 18 million pounds less than the output in 1948, and 44 percent under the peak of 388 million pounds produced in 1942. Pulled wool production for 1949 is estimated at 43 million pounds, as compared to 47 million pounds in 1948 and 67 million pounds in 1942.

The Wool Situation, BAE, Nov. 1949, p. 3.

TEXTILE RESEARCH AND EDUCATION

BAE TO STUDY USES OF COTTON, WOOL IN AUTOMOBILES

Dr. Forest Clement of the Bureau of Agricultural Economics said a survey to find out the various uses of cotton and wool in automobiles has been planned by the BAE. The purpose of the study is to determine what fabrics are preferred by auto manufacturers, their reasons for such preferences and non-preferences, and what characteristics the auto industry would like the fabrics to have. He further stated that a special staff will be assigned the task of interviewing all automobile manufacturers. Involved are the details on the cotton-wool use-patterns in auto upholstery, side panels, head linings, padding, thermal insulation, convertible tops and other features. Car tires will not be included.

Daily News Record, November 29, 1949, p. 32.

TEXTILE RESEARCH INSTITUTE TO BROADEN ITS PROGRAM OF COTTON RESEARCH

The Textile Research Institute will expand its cotton research program, and will point its research program toward trying to learn more about wrinkle resistance and crease resistance and to find out whether those characteristics may be given to cottons without inducting weaknesses in the fabric. The program will be headed by Dr. Helmut Wakeham.

Daily News Record, Dec. 1, 1949, p. 2.

OILSEEDS AND RELATED PRODUCTS

1949-50 DOMESTIC FATS & OILS PRODUCTION MAY BE HIGHEST IN HISTORY

Recent reports covering progress of this year's crops indicate that output from domestic materials could reach 11.7 billion pounds, 474 million pounds more than in 1948-49. The estimate for 1949-50 excludes an allowance of about 200 million pounds oil equivalent of oilseeds, principally soybeans, that may be available for shipment abroad. Including the oil equivalent of exported oilseeds, total new supplies from domestic materials in the 1949-50 season thus may approach 11.9 billion pounds, 200 million more than the comparable figure for the past season. (Table 13).

Production of fats and oils from domestic materials in 1948-49 was the highest attained thus far in our history. Output of 11.2 billion pounds was 1.4 billion higher than in the preceding season, and almost 200 million higher than the previous peak reached in 1943-44. The greatest gain in production occurred in cottonseed oil, but there were also substantial increases in soybean oil, lard, butter, linseed oil, and tallow and grease. If total new supplies of 11.9 billion pounds of fats and oils are actually realized in 1949-50, such a level would be sufficient to provide for a per capita consumption of 68 pounds, one-half pound more than in 1948-49, and still leave 1.25 billion pounds for new exports or increases in stock.

Table 13.- Fats and oils production from domestic materials,
United States for specified years and periods

Crop year 1/	: 1949-50 : : estimate 2/	: 1948-49 : : preliminary:	: Average : : 1943-47 :	: 1942-43
	: Million : : pounds	: Million : : pounds	: Million : : pounds	: Million : : pounds
Total fats and oils production..	11,653	11,179	9,772	10,557
Total edible vegetable oils....	3,790	3,856	2,911	2,988
Cottonseed oil.....	1,735	1,704	1,165	1,401
Soybean oil.....	1,700	1,806	1,409	1,206
Corn oil.....	225	225	213	240
Peanut oil.....	125	116	121	131
Olive oil.....	5	5	3	10
Total inedible vegetable oils..	743	741	574	734
Linseed oil.....	725	724	565	729
Tung oil.....	18	17	9	5
Total edible animal fats.....	4,845	4,391	4,249	5,026
Total inedible animal fats....	2,165	2,082	1,877	1,644
Fish oils, total.....	110	109	161	165

1/ Beginning in October except for cottonseed oil, August; linseed oil, July; peanut oil, September; and fish oil, July.

2/ 1949-50 estimate based on 6,267 thousand tons cottonseed production, 5,500 thousand tons crushed; 215.2 million bushel soybean crop, 173 million bushels crushed; 41.2 million bushel flaxseed crop, 37 million bushels crushed; 96 million combined pig crop; 85 million hogs slaughtered, yield of 36 pounds for 59 million head slaughtered under federal inspection, average of 28.5 pounds on other.

From "Industry Report, Fats and Oils," U. S. Department of Commerce, Nov. 1949.

1949 OILSEED CROP OUTPUT SECOND LARGEST IN HISTORY

The Agriculture Department's annual summary of the year showed that the total output of domestic oilseed crops was 132 percent of the 1923-32 average as compared with last year's record peak of 137.5 percent. This year's harvest is the largest since 1932 and could easily have been the largest in this Country's history if acreage yields had equalled last year's. As indicated in table 14, the huge harvest was the result of uniformly large production of most crops, rather than record volumes of a few individual ones. Record production was attained in 1949 by only rice, dry beans, and pears.

Production of oilseeds in 1949, at 15.3 million tons, virtually equals the record set in 1948 and is 41 percent above average. Soybeans retained leadership as a source of vegetable oils produced in this country, with tonnage nearly up to the 1948 record. Cottonseed is likely to exceed last year's total by 9 percent and the average by 40 percent. Both flaxseed and peanuts are below last year's record tonnages, with peanuts about average and flaxseed about 45 percent above average.

Table 14.- Total production and yield per acre of selected crops, United States, for specified years and periods

Crop	Unit	Production (millions)			Yield per acre		
		1949	1948	3/ Average 1938-47	1949	1948	4/ Average 1938-47
Cottonseed.....	ton	6.52	5.9	4.6	473.0	514.0	433.2
Flaxseed.....	bu.	43.6	54.5	30.1	8.9	11.2	9.2
Peanuts 1/.....	lb.	1,853.1	2,338.5	1,845.7	762.0	706.0	692.0
Rice.....	bu.	89.1	85.1	62.9	49.0	47.8	46.6
Soybeans for beans.1	bu.	222.3	223.0	148.4	22.4	21.4	18.7
Sweetpotatoes.....	bu.	52.2	50.2	63.6	100.1	97.4	89.7

1/ Picked and threshed.

2/ Based on crop forecast and the average ratio of lint to seed during the last 5 years.

3/ Revised figures.

From "Crop Production," BAE, Dec. 1949.

VEGETABLE OIL PRICES MODERATELY HIGHER; MEALS DECLINE

Prices of most vegetable oils increased slightly by mid-December of this year and in most cases had more than compensated for losses sustained during the previous month. December oil prices, except for tung oil, were very substantially below those of a year ago. Prices of most oilseed meals were generally lower in November and ranged from 8 to 15 percent below those of a year earlier. For each month since August, the price of peanut meal has been declining, and on December 17 it sold for \$57.00 per ton as compared to \$70.00 per ton in August of this year.

Table 15.- Prices of vegetable oils and meals

	Dec. 1949	Nov. 1949	11/ Oct. 1949	Dec. 1948
Cents per pound				
OILS 1/	Dec. 19			
Cottonseed oil.....	10.1	9.6	10.2	17.1
Peanut oil.....	11.8	10.4	11.5	18.1
Soybean oil.....	10.3	9.6	10.1	17.3
Corn oil.....	11.0	10.0	11.5	17.8
Coconut oil 2/.....	16.5	16.7	16.0	23.2
Linseed oil 3/.....	18.5	18.6	19.2	29.0
Tung oil 4/.....	28.0	27.5	27.2	23.8
Dollars per ton				
MEALS 5/	Dec. 17			
Cottonseed meal 6/.....	61.50	61.90	59.70	71.10
Peanut meal 7/.....	57.00	59.80	61.20	67.40
Soybean meal 8/.....	66.00	69.40	74.80	78.00
Coconut meal 9/.....	57.00	50.50	48.20	75.60
Linseed meal 10/.....	69.00	70.20	66.55	83.00

1/ Crude, tanks, f.o.b. mills except as noted. From Oil, Paint and Drug Reporter, (daily quotations) and from Fats and Oils Situation, BAE (monthly quotations).

2/ Crude, tanks, carlots, Pacific Coast. Three cents added to allow for tax on first domestic processing.

3/ Raw, drums, carlots, New York.

4/ Drums, carlots, New York.

5/ Bagged carlots, as given in Feedstuffs (daily quotations and Feed Situation, BAE (monthly quotations).

6/ 41 percent protein, Memphis.

7/ 41 percent protein, S.E. Mills.

8/ 41 percent protein, Chicago.

9/ 19 percent protein, Los Angeles.

10/ 34 percent protein, Minneapolis.

11/ Preliminary.

COTTONSEED: VALUE OF SOLVENT EXTRACTED MEAL GIVEN

Results of experiments conducted by a member of the Buckeye Cotton Oil Co. indicate that solvent extracted cottonseed oil meal can serve a very useful purpose in feeds for all classes of livestock and poultry. It was shown that this meal is equal to and in some instances superior to old process cottonseed oil meal. Unlimited amounts of solvent extracted meal can be fed to cattle and sheep with results comparable to the old process meal. For growing chicks, cottonseed meal can be used to provide up to 50 percent of the high protein supplement needed. Seven percent of this meal can be included in laying rations without ill effects when eggs are being stored, and satisfactory hatchability can be obtained with 10 percent of solvent extracted cottonseed meal in a diet for laying hens. It was further shown that cottonseed meal can be used in feeding swine to supply up to 9 percent of the ration or up to one-half of the protein supplement. Utilization of this information provides a definite advantage in formulating feeds when, as is often the case, soybean oil meal is higher priced than cottonseed oil meal.

Feedstuffs, December 3, 1949, p. 45.

PEANUTS: SHELLED PEANUTS REPORTED USE ABOVE LAST YEAR

The amount of shelled peanuts (total, all types and grades) used domestically this season through Nov. 30 totaled 283 million pounds, as compared with 197 million pounds used to Nov. 30, 1948. Edible grade shelled peanuts consumed thus far this season totaled 146 million pounds as compared with 132 million consumed to a comparable date last season. More peanuts were used during the first three months this season than for 1948 for each major product except for salted peanuts.

Table 16.- Shelled peanuts (raw basis) reported used domestically in primary products

	: Sept. 1 - Nov. 30	:: Season, Sept. 1 - Aug. 31
	: 1949 4/	: 1948
	: 1,000	: 1,000
	: pounds	: pounds
Total, all grades.....	282,852	196,854
Edible grades, total...	146,470	132,235
Peanut candy 1/...	38,533	31,880
Salted peanuts.....	34,262	35,767
Peanut butter 2/...	69,700	63,182
Other products.....	3,975	1,406
Crushed for oil, cake:		
and meal 3/.....	136,382	64,619

1/ Includes peanut butter made by manufacturers for own use in candy.

2/ Excludes peanut butter made by manufacturers for own use in candy.

3/ Includes ungraded or straight run peanuts.

4/ Revised.

From Peanuts Stocks and Processing, BAE, December 20, 1949

RICE: TWO TYPES ADDED TO SUPPORT PROGRAM

The Agriculture Department added two varieties of rice to its 1949 crop price support program. It will now support prices of R. N. and Kamrose, two specialized types. The value factors used to compute support rates of R. N. will be

the same as those used for varieties for Fortuna and Edith. The rates for Kamrose will be the same as those for Blue Rose and Arkrose. The state of Arizona was also added to the area for rice price support.

Daily Mill Stock Reporter, Dec. 20, 1949, p. 5.

SOYBEAN: WORLD OUTPUT SLUMPS

World soybean production this year slipped 501.7 million bushels, 10 percent below the record outturn in 1948, largely through reductions in production in China, Manchuria and the United States, the Office of Foreign Agricultural Relations estimates. China's 1949 crop is down to 179.2 million bushels, a 15 percent reduction for the year; this country produced 215 million bushels, a 2 percent cut; and Manchuria's production has declined steadily in recent years and is estimated at only 66 million bushels.

In addition, OFAR reports that Europe's output is declining from year to year, and that Italy is the only European country making a report on production this year—a negligible 130 thousand bushels.

Journal of Commerce, Dec. 13, 1949, p. 18.

TUNG OIL: U. S. PRODUCTION MAY HIT 20 MILLION POUNDS

The domestic tung oil industry this year is expected to produce 20 million pounds of oil, only one-sixth of imports from China in 1948, and less than one-eighth of Chinese imports in the peak year of 1937. The price of domestic tung oil, which was pegged at 38-3/8 cents per pound, or about \$110 per ton, for nuts during the war, fell to a low of 16 cents last winter. The farm law which was signed October 31 guarantees a minimum net return of \$64.20 per ton of air-dried fruit from 1950 to 1954 inclusive, or about 25 cents per pound for oil. Only 7 so-called non-basic commodities achieved the mandatory class in the new farm bill—Irish potatoes, milk, butterfat, shorn wool, mohair, honey—and tung nuts.

Journal of Commerce, Nov. 28, 1949, p. 2A.

LINTERS AND CELLULOSE

SYNTHETIC YARN MAKERS MOVE TO PRODUCE OWN RAW MATERIALS

Several of the largest producers of synthetic fibers are considering acquisition or construction of additional basic raw material facilities in order to make them less dependent upon outside sources of supply. So far as is known, the Celanese Corp. of America and the American Viscose Corp. are the only producers of synthetic fibers who had previously undertaken to supply their own major raw materials. The Celanese Corp. is constructing a wood cellulose plant in British Columbia, which will be in operation sometime next year. Avisco, in conjunction with Puget Sound Pulp and Paper, Inc., formed a company last year to produce dissolving pulp in Ketchikan, British Columbia. The output of this plant will be 300 tons per day, about 25 percent of Avisco's requirements. In the woodpulp industry, Rayonier Inc. is the largest producer of purified wood cellulose used in the manufacture of rayon. In 1948, Rayonier supplied approximately one-half of the rayon industry's total cellulose requirements.

Journal of Commerce, Nov. 30, 1949, p. 16.

LINTERS: RECORD PRODUCTION IN OCTOBER: PRICES FOR FELTING GRADES DECLINE, CHEMICAL GRADES UP

Production of linters at oil mills reached a record of 227 thousand bales in October. This is the largest monthly production in the industry's history and

compares with 182 thousand bales in September and 222 thousand in October a year ago, the previous high. In the first three months of this season, about 472 thousand bales of linters were produced. This is 6 percent larger than the previous record high first quarter figure of 444 thousand bales which was produced in the first three months of last season. Total stocks in consumer establishments, public storage and warehouses, and oil mills, amounted to 468 thousand bales in October, as compared with 410 thousand bales on hand at the end of September and 437 thousand on October 31, 1948.

Prices for chemical grade linters, which dropped to the lowest level in 10 years during the early part of the season, failed to show any significant signs of recovery during November except in the southwest. Demand for chemical linters improved in the southwest during November and the prices for Grades 6 and 7 advanced about one-half cent per pound. Reports indicated that some oil mills were holding chemical linters for higher prices. The average price for Grade 6 was 2.02 cents in November against 1.92 cents in October and 2.95 in November 1948.

Table 17.- Cotton linters: Production, consumption, by industries, stocks, and prices, United States, for specified months

	: November :	October :	September:	August :	November
	: 1949 :	1949 :	1949	1948	1948
	: 1,000 :	1,000 :	1,000 :	1,000 :	1,000
	: bales :	bales :	bales :	bales :	bales
Production 1/.....	4/ :	227.0 :	182.0 :	63.0 :	219.0
Consumption 2/.....	131.5 :	143.1 :	140.7 :	136.4 :	116.0
Quantity bleached.....	82.8 :	84.5 :	78.9 :	75.6 :	68.0
Other industries.....	48.7 :	59.6 :	61.9 :	60.8 :	48.3
Stocks 3/.....	4/ :	468.0 :	410.0 :	385.0 :	526.0
Prices	: Cents :	Cents :	Cents :	Cents :	Cents
No. 2 grade, per lb....	9.86 :	10.29 :	10.10 :	8.67 :	8.08
No. 4 grade, per lb....	5.63 :	6.25 :	6.16 :	5.16 :	5.04
No. 6 grade, per lb....	2.02 :	1.92 :	1.92 :	1.92 :	2.95

- 1/ From Weekly Cotton Linters Review, PMA, Cotton Branch, USDA.
2/ From Facts for Industry, "Cotton and Linters," Bureau of the Census.
3/ Total stocks in consumer establishments, public storage and warehouses, and oil mills. Stocks at end of the month. From Facts for Industry, "Cotton Linters," Bureau of the Census.
4/ Not available.
5/ Preliminary.

WAX CONTENT OF TEXAS' COTTON LINTERS STUDIED

Two members of the Bureau of Industrial Chemistry at the University of Texas recently completed a survey of the wax content of some Texas cotton linters. The study was made to correlate the wax content of the fiber with rainfall, irrigation, fertilization and types of cotton seed. Previous studies have shown the valuable properties of cotton wax and have indicated its commercial importance if properly purified.

It was found that the wax content of first and second cut cotton linters varied greatly between different sections of the state even though the linters

originated from the same seed types. A somewhat better comparison existed between those linters which were grown under similar conditions of rainfall and irrigation. The wax content of linters from two areas of approximately the same amount of rainfall were nearly the same, and a similar conclusion was reached for 2 areas in which the land was irrigated.

The Cotton Digest, Dec. 3, 1949, p. 7.

LINTERS PULP AND WOOD PULP PRICES UNCHANGED

Cellulose prices remained unchanged during the month of November.

Table 18.- Average annual price of purified linters and dissolving wood pulp, 1946-48 and monthly quotations August-November 1949

(Cents per pound)				
	Purified linters 1/	Standard viscose grade	Wood pulp 2/ High-tenacity: viscose grade	Acetate & cupra grade
1946.....	9.50	5.60	5.85	6.15
1947.....	16.30	7.03	7.44	8.04
1948.....	11.25	7.93	8.44	9.20
1949, August.....	8.00	7.95	8.40	8.90
1949, September.....	8.00	7.95	8.40	8.90
1949, October.....	8.00	7.50	8.05	8.55
1949, November.....	8.00	7.50	8.05	8.55

1/ Weighted averages, 1946-47. On 7 percent moisture basis, f.o.b. pulp plant. Average freight to users is 0.5 cents per pound. Prices supplied by a producer.

2/ Average of average monthly prices, 1946-47. Compiled from Rayon Organon and from letters to us from producers. Wood pulp prices are on a 10 percent moisture basis, f.o.b. domestic producing mill, full freight and 3 percent transportation tax allowed, December 1, 1947, on; freight equalized with that of Atlantic or Gulf port carrying lowest backhaul rate to destination plus 3 percent backhaul charges, prior to December 1.

KOPPERS TO DEVOTE ALL PLASTIC FACILITIES TO POLYSTYRENE

Koppers Co., Inc., plans to pull out of the cellulose plastics field and devote all its plastic manufacturing facilities to the production of polystyrene. Cellulose plastics, based on cotton linters or wood pulp have been meeting increased competition recently from styrene plastics which are lighter and somewhat cheaper.

Koppers chemical division has for several years been compounding and coloring cellulose acetate and ethyl cellulose at its Berkeley Heights, N. J. plant. In the future, only polystyrene will be made at the plant. Production facilities at Korbuta, Pa., are already entirely devoted to polystyrene.

Wall Street Journal, Dec. 9, 1949, p. 14.

MISCELLANEOUS PRODUCTS

1949 SALES OF SYNTHETIC DETERGENTS UP SHARPLY

Sales of synthetic detergents, as reported by 17 soap manufacturers, amounted to over 400 million pounds in 1948. Sales, amounting to 69 million pounds in the first quarter of 1948, rose to over 120 million during the fourth quarter, a gain of approximately 75 percent. As a large portion of synthetic detergent sales are made by chemical and other manufacturers not included in the survey, the trade estimates of about 700 million during 1948 appear to be sound. Sales of synthetic detergents during the first nine months of 1949 by member companies of the soap association amounted to 514 million pounds, compared with 281 million for the same period in 1948, representing an increase of approximately 83 percent.

Total sales of non-liquid soaps in 1948, reported by 68 manufacturers, estimated to represent approximately 90 percent of all soap of this type made and sold by U. S. manufacturers, amounted to 2,482 million pounds. Sales in the first 9 months of 1949, amounting to 1,948 million pounds, were approximately the same as in the comparable months of 1948. During the year 1948, sales of liquid soap amounted to 3,301 thousand gallons. Sales for the first 9 months of 1949, amounting to 4,471 thousand gallons, were 87.6 percent higher than in the comparable period of last year (table 19). It is estimated that synthetic detergents have replaced traditional soaps for many purposes and also have prevented an expansion of possibly 20 percent in soap usage which normally would have been expected as a result of the increase in population.

Industry Report, Fats and Oils, U.S. Dept. of Commerce, Nov. 1949, p. 22.

Table 19.- Sales of soap and synthetic detergents, United States, for specified years and quarters

Year	Non-liquid soap	Liquid soap	Detergents	
			Liquid	Solid
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
1939.....	2,739,479	1,819	1/	1/
1946.....	2,312,870	3,263	1/	1/
1948.....	2,481,781	3,301	709	401,154
1st quarter.....	657,911	756	99	68,934
2nd quarter.....	631,308	939	151	96,672
3rd quarter.....	655,884	688	224	115,408
4th quarter.....	536,678	918	235	120,140
1948 (1st 9 months).....	1,945,103	2,383	474	281,014
1949 (1st 9 months).....	1,947,993	4,471	7,504	506,785
1st quarter.....	614,621	1,331	1,280	153,591
2nd quarter.....	626,527	1,443	1,848	157,471
3rd quarter.....	706,845	1,697	4,376	195,723

1/ Data not available.

From "Industry Report, Fats and Oils," U. S. Department of Commerce, Nov. 1949, p. 26.

AGRICULTURAL RESIDUE FLOUR PROVES VALUABLE AS EXTENDERS IN PHENOLIC RESIN GLUES

It has been found that 21 to 48 percent savings in resin can be made when 13 agricultural residue flours are used as extenders in plywood glues prepared with a laboratory prepared liquid, phenol-formaldehyde resin. Three commercial resins

were extended with agricultural residue flours with a saving in resin as high as 59 percent over that of unextended resin glue. The greatest saving in resin was obtained by the use of these flours with resins that produced glues of low consistency for a given amount of resin solids. Agricultural residue extenders include wheat straw, cottonseed hull, pecan shell, corncob, flax shives, black walnut, corncob lignin, soft almond shell, rice hull, English walnut, apricot pit, hard almond shell, and peanut shell.

Modern Plastics, Oct. 1949, p. 111.

PROCTOR AND GAMBLE TO BUILD NEW LABORATORY

Plans for the construction of a new research building near Venice, Ohio, were announced by Richard R. Deupree, chairman of the board of the Proctor and Gamble Company. The two-story research building, according to the announcement, will house the most modern research equipment and laboratory facilities and will permit a material increase in the company's research and development activities. It is hoped that the building will be ready for occupancy in about two years. The company estimates that the building will cost at least \$1,500,000.

"This building," according to J. G. Pleasants, vice president in charge of manufacture, "has been made necessary by the growth of our business and the need for more facilities to carry on the work which is such an important part of our never-ending search for products that will serve the public better." Mr. Pleasants pointed out that "basic research" is devoted to studying the "basic properties and behavior of materials we work with" and that from this activity have come some of the most important developments in the soap, synthetic detergent, shampoo and vegetable shortening fields.

Journal of Commerce, Nov. 23, 1949, p. 17.

Year	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500	2501	2502	2503	2504	2505	2506	2507	2508	2509	2510	2511	2512	2513	2514	2515	2516	2517	2518	2519	2520	2521	2522	2523	2524	2525	2526	2527	2528	2529	2530	2531	2532	2533	2534	2535	2536	2537	2538	2539	2540	2541	2542	2543	2544	2545	2546	2547	2548	2549	2550	2551	2552	2553	2554	2555	2556	2557	2558	2559	2560	2561	2562	2563	2564	2565	2566	2567	2568	2569	2570	2571	2572	2573	2574	2575	2576	2577	2578	2579	2580	2581	2582	2583	2584	2585	2586	2587	2588	2589	2590	2591	2592	2593	2594	2595	2596	2597	2598	2599	2600	2601	2602	2603	2604	2605	2606	2607	2608	2609	2610	2611	2612	2613	2614	2615	2616	2617	2618	2619	2620	2621	2622	2623	2624	2625	2626	2627	2628	2629	2630	2631	2632	2633	2634	2635	2636	2637	2638	2639	2640	2641	2642	2643	2644	2645	2646	2647	2648	2649	2650	2651	2652	2653	2654	2655	2656	2657	2658	2659	2660	2661	2662	2663	2664	2665	2666	2667	2668	2669	2670	2671	2672	2673	2674	2675	2676	2677	2678	2679	2680	2681	2682	2683	2684	2685	2686	2687	2688	2689	2690	2691	2692	2693	2694	2695	2696	2697	2698	2699	2700	2701	2702	2703	2704	2705	2706	2707	2708	2709	2710	2711	2712	2713	2714	2715	2716	2717	2718	2719	2720	2721	2722	2723	2724	2725	2726	2727	2728	2729	2730	2731	2732	2733	2734	2735	2736	2737	2738	2739	2740	2741	2742	2743	2744	2745	2746	2747	2748	2749	2750	2751	2752	2753	2754	2755	2756	2757	2758	2759	2760	2761	2762	2763	2764	2765	2766	2767	2768	2769	2770	2771	2772	2773	2774	2775	2776	2777	2778	2779	2780	2781	2782	2783	2784	2785	2786	2787	2788	2789	2790	2791	2792	2793	2794	2795	2796	2797	2798	2799	2800	2801	2802	2803	2804	2805	2806	2807	2808	2809	2810	2811	2812	2813	2814	2815	2816	2817	2818	2819	2820	2821	2822	2823	2824	2825	2826	2827	2828	2829	2830	2831	2832	2833	2834	2835	2836	2837	2838	2839	2840	2841	2842	2843	2844	2845	2846	2847	2848	2849	2850	2851	2852	2853	2854	2855	2856	2857	2858	2859	2860	2861	2862	2863	2864	2865	2866	2867	2868	2869	2870	2871	2872	2873	2874	2875	2876	2877	2878	2879	2880	2881	2882	2883	2884	2885	2886	2887	2888	2889	2890	2891	2892	2893	2894	2895	2896	2897	2898	2899	2900	2901	2902	2903	2904	2905	2906	2907	2908	2909	2910	2911	2912	2913	2914	2915	2916	2917	2918	2919	2920	2921	2922	2923	2924	2925	2926	2927	2928	2929	2930	2931	2932	2933	2934	2935	2936	2937	2938	2939	2940	2941	2942	2943	2944	2945	2946	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